APPLICATION FOR UNITED STATES PATENT

Inventor:

Michael Gauselmann

Invention:

METHOD FOR OPERATING A COIN ACTUATED

ENTERTAINMENT AUTOMAT

Attorney's Docket Number: ADP231

Horst M. Kasper, their attorney 13 Forest Drive, Warren, N.J. 07059 Tel. (908) 757-2839; Reg.No. 28559 Attorney's Docket No.: ADP231

SPECIFICATION

METHOD FOR OPERATING A COIN ACTUATED ENTERTAINMENT AUTOMAT

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a method for operating a coin actuated entertainment automat with a coin acceptance device and a coin test device, a symbol display device, a control unit for controlling the course of the game, a microcomputer and a pseudo random number generator.

2. <u>Brief Description of the Background of the Invention</u> <u>Including Prior Art</u>

A circuit arrangement for a money game automat is known from the German patent DE 2818503 C3, which teaches three next to each other disposed roller shaped circulating bodies, wherein the winning symbols are disposed on the circulating bodies. After the first stopping of the three circulating bodies, the middle circulating body can be placed again in circulation and be stopped at a randomly

determined locking position by way of a follow-up starting automatic, which can be connected upon activation of an operating element, in case of a non-winning symbol combination. The winning combination can improve by way of such circuit arrangement without that continuously attention has to be given to the incoming symbol combinations in the first drawing course.

SUMMARY OF THE INVENTION

1. <u>Purposes of the Invention</u>

It is an object of the present invention to improve a class forming entertainment automat of the initially recited kind such that more game excitement and tension is offered and such that a further winning chance is offered depending on the skill of the player.

It is another object of the present invention to furnish an entertainment automat with additional procedural features.

It is yet another object of the present invention to provide a networked entertainment automat, where the whole

network participates in exciting additional winning possibilities.

2. <u>Brief Description of the Invention</u>

The apparatus according to the present invention is associated with the advantage that one and all symbol combinations can be changed or improved within a predetermined time window by follow-up drawing until a predetermined winning combination has been reached. The winning amount is depending on the number of the reached winning combination, which can be reached one or more times within a predetermined time window.

According to a further embodiment of the invention, the determination of the winning value is performed by a base game and a supplemental game. In case of a predetermined winning combination or a predetermined winning value is reached in the base game, then successively the supplemental game is activated. A predetermined starting combination has to be improved in one or several predetermined winning symbol combinations by an undetermined number of follow-up starting possibilities within a

predetermined time window in a supplemental game. The winning value reached in the supplemental game depends on the number of the obtained winning combination within the predetermined time window.

According to a further embodiment of the invention several coin actuated entertainment automats are networked to each other. If a predetermined value of a common jackpot is surpassed, then the coin actuated entertainment automats disposed in the network are simultaneously switched into a common supplemental game. Depending on the game results in the supplemental game, a part share of the jackpot value is determined. Each player who participated in the supplemental game receives a winning value corresponding to his or her game performance, whereby no discrimination of an individual is performed. The method according to the present invention furthermore is associated with the advantage that a fixed winning value is associated to no winning combination at the start of the game. At the end of the supplemental game it is determined, which winning value is coordinated to which winning combination.

The novel features which are considered as characteristic for the invention are set forth in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

In the accompanying drawing, in which are shown several of the various possible embodiments of the present invention:

Figure 1 is a perspective view showing a coin actuated entertainment automat with the display device presenting symbols,

Figure 2 is a view of a diagram showing a block circuit diagram with the essential device groups for operating an entertainment automat,

Figure 3 is a view of a diagram showing a flow diagram for determining a winning value within a predetermined game time,

Figure 4 is a view of a driagram showing a flow diagram for determining a winning value in a supplemental game,

Figure 5 is a view of a diagram showing a flow diagram for determining a winning value with networked entertainment automats, when this entertainment automat assumes the master function,

Figure 6 is a view of a diagram showing a flow diagram for determining a winning value for an entertainment automat operating as a slave in a network,

Figure 7 is a view of a diagram showing a flow diagram for determining a jackpot winning value at an entertainment automat operating as a master in a network, and

Figure 8 is a view of a diagram showing a flow diagram for determining a jackpot winning value at an entertainment automat operating as a slave.

DESCRIPTION OF INVENTION AND PREFERRED EMBODIMENT

A coin operated entertainment automat designated with reference numeral 1 includes a symbol display device 2,

which can be formed as a monitor or as a flat picture Operating elements 3 are disposed below the symbol display device 2 in the kind that an operating element 3 is associated to each presented winning symbol. A breakout 4 is furnished neighboring to the symbol display device 2, where a money or bank note testing device follows to the breakout 4. An opening 5 for receiving coins is disposed below the breakout 4. The coin actuated entertainment automat 1 comprises a coin collection position, not illustrated in detail, with a payout device. The course control is performed by way of a control unit 7 comprising a microcomputer 8, wherein the control unit 7 controls the total and complete game course and function course of the coin actuated entertainment automat 1.

The device groups required for operating a coin actuated entertainment automat 1 are illustrated as a block circuit diagram in figure 2. The entertainment automat 1 comprises a symbol game device 2 comprising a picture screen tube or, respectively, a flat picture screen, by way of which symbol combinations are presented and displayed, wherein a winning value of different level is coordinated to some of the symbol combinations. The symbol game device 2 is connected to a control unit 7 by way of an intermediary

of video controller 6 having a symbol memory storage. control unit 7 of the coin actuated entertainment automat 1 comprises a microcomputer 8 with the calculating circuit 9, a control circuit 10 and accumulators 11. The programs, such as pseudo random number generator program, winning value recognition program, display control program, and winning plan program, required, are contained in a fixed value memory storage (read only memory ROM) 12. The for each entered game determined pseudo random numbers are intermediately stored in an operating data memory storage (random access memory RAM) 13. In addition, obtained values are registered in credit balance counters and other counters in the operational data memory storage (random access memory RAM) 13.

The control circuit 7 comprises a communications board 20 in addition to a microcomputer 8. The display means 21 of a jackpot and a data exchange and data balancing of the entertainment automat 1 disposed in the communications network are controlled by the communications board 20. In addition, the microcomputer 8 includes a serial interface not illustrated. A connection is furnished to the communications board 20 with the serial interface (TTL-level). The serial interface is formed as an RS 232

interface.

The communications board 20 comprises a selfcontained CPU 22 (Hitachi 64 180 or a Zilog Z80 180) with the serial interface 32 disposed on the CPU side. central processing unit CPU 22 has coordinated a fixed value memory storage 24 (read only memory ROM) of the type 27C 1000/2000 and a battery buffered operating data storage 25 (random access memory RAM) of the type DS 1225/1230Y. The connection between the central processing unit CPU 22, the memory components 24, 25 and a serial communications controller 28 (Zilog Z85 C30) with the serial ports is performed by way of an address decoder 26 and an I/O decoder 27 and a bus. A serial port 29 of the communications controller 28 leads under connection of a power amplifier 30 or MAX487) to the display means 21 formed as a large display field, with which the temporary jackpot stand is displayed. An external personal-computer not illustrated is connectable at an interface 31 of the communications controller 28 formed as an RS 232 interface. An interface adapter 33 is connected at a serial interface 32 of the communications controller 28 formed as a serial interface RS 485. The interface adapter 33 comprises essentially an optical coupler 35 of the type 6 N 136 for galvanic

separation and a power stage 34 disposed successively to the optical coupler 35. The network cabling is connected to the power stage 34.

The combining of the entertainment automats 1 and the communications of the entertainment automats 1 is performed through the respective communications board 20. Each communications board 20 carries an individual address number, which is once set through a rotary switch. After switching on of the entertainment automat 1 the automatic recognition is performed determining this entertainment automat 1 performed the master function for the slave function. After the switching on, each one of the entertainment automats 1 the automatic recognition is performed as to which entertainment automat assumes the master function or the slave function. Ater turning on, the entertainment automats wait for a time period of three seconds + (50 milliseconds times individual address number) for a recognition signal of the master. Since at this point in time no entertainment automat 1 has assumed the master function, the recognition signal does not appear. case the communications board 20 sends after an additional two seconds a master function assumption signal. to the above recited time calculation, the entertainment

automat 1 with the lowest address number will send this signal first and assumes the master function. The remaining communications board 20 will confirm the receipt of this signal and will behave as slaves in the communications The data are actualized, that is the master calls network. for the data from each individual slave, accumulates the total sum and delivers the data back to the slaves through the communications network every (30 milliseconds times entertainment automat number in the communications network) such that each communications board 20 contains the same data contents. Each slave can assume the master function in case of a failing function of the master thereby. compound offers the advantage of multimaster capabilities. Each communications board 20 contains its own central processing unit CPU 22 with the communications software and all data relevant for the control of the compound and the communications board 20 can therefore assume both the function of the master as well as the function of a slave. Based on this feature it is assured that even upon failure of a master at each time the valid state of data and the overall functioning of the system remains intact with the exception of the original master.

If more than one master should respond after turning

on of the entertainment automats 1, that is one master receives the master signal of another master, then the master with the higher address number will deactivate and perform the slave function.

After a successful automatic determination of the master/slave function, in each case after the turning on of the entertainment automat 1, the communications board 20 delivers a release signal to a control unit 7. A configuration can be performed with a personal-computer PC as to what percentage of the game stake case is to be delivered to the jackpot through an interface formed of type RS 232 not illustrated in detail. The filling state of the jackpot is illustrated on the one hand with a symbol display device 2 and on the other hand through a central large display field 21.

A jackpot release value is preset by giving a lower jackpot value and an upper jackpot value. The jackpot release value disposed between the lower preset jackpot value and in the upper preset jackpot value is determined with a random number generator of the control unit 7. Upon reaching or surpassing of the jackpot release value, the jackpot is frozen and a jackpot game playout sequence is started.

The entertainment automat 1 with the master function inquires the data are from each individual slave every 30 milliseconds and receives thus the increase amount of the jackpot. These part amounts are accumulated by the master, the actual jackpot value is calculated and is delivered to the slaves through the communications network. If thereby a reaching or surpassing of the jackpot release value is determined, then a special jackpot game sequence is activated by the control unit 7, which jackpot game sequence is the same at all entertainment automats 1.

If the jackpot game sequence was initiated, then the possibility is given to each user of the entertainment automat 1 at each entertainment automat 1, which is networked and was previously played, to achieve a predetermined result within a predetermined and with the video screen 8 displayable time period, that is the player has to reach a winning symbol combination predetermined by the entertainment automat after an arbitrary number of games during this time period. The time and way of the supplemental game is determined by the game software employed.

A course diagram or flow diagram of the game action is illustrated in figure 3. The entertainment automat 1 is

activated in case of a credit balance state exhibiting a game stake monitored by the operational block 36. The total playing time is monitored by an operational block 37. The winning symbols are randomly determined during the complete game time by the control unit 7 not illustrated in detail and are illustrated and displayed with the symbol display device 2 (operational block 38). A branching block 39 is activated by the operational block 38 for determining the remaining residual game time. It is determined in a branching block 40 in case of a presence of remaining residual game time, if an operating element 3 furnished on the front side of the entertainment automat 1 has been actuated. In case of no operating element 3 activation a return to the branching block 39 is performed.

In case of an activation of an operational element (entry block 41 -- 42) it is determined, which operational element 3 was actuated. In case of actuation of an operational element 3 according to the entry block 41, then // for example, five card symbols disposed next to each other are presented with the symbol display device 2 wherein the symbol storage comprises 20 card symbols, namely ten, Jack, 2) Queen, King, and ace in each case in all four colors. The not held cards are drawn by new cards determined randomly

from the card storage in the operational block 43. winning value of the displayed symbol combination is determined and displayed in the operational block 44. the following it is checked in the branching block 45, if the maximum winning value, for example a Royal Flush, is displayed with the symbol display device 2. In case of a non-reaching of the maximum winning value, a return is performed from the operational block 45 to the operational wherein new winning symbols are randomly determined in the operational block 38 and are displayed with the symbol display device 2. Upon remaining of a /1 residual game time the winning symbols displayed with the p symbol display device 2 can be held in the following by activation of the operational element 3 (operational block 42, operational block 46) or all cards held so far can be M thrown out by actuation of the entry block 41.

A return is performed from the branching block 45 to the branching block 39 by checking if the game time has ended. In case of an ended game time, the actualized winning value is determined in the operational block 47 and 20 is displayed with a coordinated display means 21 not illustrated in detail. A return is performed from the operational block 47 to the operational block 36 by

checking, if a further credit balance state for basing a further game stake is present.

The previously in Figure 3 presented game element represents a supplemental game unit according to an embodiment illustrated in Figure 4. The coin actuated entertainment automat 1 comprises a base game and a supplemental game. Symbol combinations are determined randomly in case of a credit balance state exhibiting a game stake in the credit balance counter of the entertainment automat 1, wherein the determined symbol combinations are displayed with the symbol display device 2. predetermined winning value is coordinated to the symbol combination displayed by the symbol display device 2 or if a particular symbol combination is displayed with the symbol display device 2, then a switch over is performed from the base game (operational block 48) into a special game or supplemental game by the control unit 7 not illustrated in A determination if a preset jackpot winning value has been reached or surpassed for a predetermined symbol combination is made in the branching block 49.

The total game time is monitored by the operational block 37. The winning symbols are randomly determined by the control unit 7 not illustrated in detail during the

total game time and are displayed with the symbol display device 2 (operational block 38). A branching block 39 for determining the remaining residual game time is activated by the operational block 38. In case of a presence of remaining residual game time, the branching block 40 checks, if an operational element 3 present on the front side of the entertainment automat 1 has been actuated. In case of no actuation of the operational element a return is performed to the branching block 39.

In case of an actuation of the operational element (entry block 41 -- 42) it is checked, which one operational element 3 was actuated. For example five next to each other disposed card symbols are displayed with the symbol display device 2 upon actuation of an operational element 3 according to the entry block 41, wherein the symbol storage comprises 20 card symbols, namely ten, Jack, Queen, King, and ace in each case in all four colors. Not held cards are drawn by new cards randomly determined from the card storage in the operational block 43. The winning value of the displayed symbol combinations is determined and displayed in the operational block 44. In the following it is checked in the branching block 45, if the maximum winning value, for example a Royal Flush, is displayed with the symbol display

device 2. Upon non-reaching of the maximum winning value a return is performed from the branching block 45 to the branching block 39, wherein the game time is checked as previously recited in the branching block 39. Upon remaining of a residual game time, winning symbols displayed with the symbol display device 2 can be held (operational block 42, operational block 46) by actuating of the operational element 3 or all up to now held cards can be thrown out by actuating the entry block 41.

A return is performed from the branching block 45 to the branching block 39 by checking if the game time has ended. In case of an ended game time, the actualized winning value is determined in the operational block 47 and is displayed with a coordinated display means 21 not illustrated in detail. A return is performed from the operational block 47 to the operational block 36 by checking if a further credit balance state sufficient for a game stake is present.

Several coin operated entertainment automats 1 of of the same construction type are networked to each other according to a further embodiment of the Invention illustrated in Figure 7. The network (operational block 49) is initiated by actuating the power switch of each

entertainment automat 1, wherein one of the entertainment automats 1 assumes the master function according to Figure The further entertainment automats 1 present in the network switch to a slave function according to Figure 6. The master function comprises essentially that the coordination of the entertainment automats 1 present in the network is assumed, in particular with respect to the collection of data through the counter state of the jackpot amount and the release of a common special game, which takes o place at all entertainment automats 1 present in the network \| at the same time. In case of a sufficient credit balance state a symbol combination is randomly determined in the operational block 50 and is displayed in the symbol display device 2. An adjustable shared part amount of the game stake of each base game is transferred to a common jackpot counter (operational block 51). The counter state of the jackpot counter is checked in a branching block 51 following to the determination of the winning value in the base game. If the predetermined jackpot counter state is reached or surpassed, then the master (operational block 53) sends a control signal to all other entertainment automats 1 present in the network, wherein the slaves switch to the special game based on the control signal after termination of the

base game. It is monitored in the operational block 54, if an okay signal was returned by all slaves. In the following the special game is started at the same time in all participating coin actuated entertainment automat {1.

The entertainment automat 1 is activated in case of a credit balance state exhibiting a game stake. The total game time is monitored by the operational block 37. The winning symbols are randomly determined by the control unit 7 not illustrated in detail and are displayed (operational block 38) with the symbol display device 2 within the total game time. A branching block 39 determining the remaining residual game time is activated by the operational block 38. In case of a presence of remaining residual game time, it is checked in a branching block 40, if an operational element 3 disposed on the front side of the entertainment automat 1 was actuated. A return is performed to the branching block 39 if no operational element actuation took place.

In case of actuation of the operational element (entry block 41 - 42) it is checked, which operational element 3 was actuated. In case of actuation of an operational element 3 according to entry block 41, for example five next to each other disposed card symbols are displayed with the symbol display device 2, wherein the

symbol storage comprises 20 card symbols, namely ten, Jack, Queen, King, and ace in each case in all four colors. Cards not held are redrawn by new cards randomly determined from the card storage in the operational block 43. The game result of the displayed symbol combination is determined and displayed in the operational block 44. In the following it is determined in the branching block 45, if the maximum winning value, for example a Royal Flush, is displayed with the symbol display device 2. A return is performed from the branching block 45 to the branching block 39 in case of a formula of the maximum winning value, wherein the game time is checked in the branching block 39.

Upon reaching of the maximum winning value a return is performed from the branching block 45 to the operational block 38, wherein new winning symbols are randomly determined in the operational block 38 and are displayed with the symbol display device 2.

In case of a remaining residual game time, winning symbols displayed with the symbol display device 2 can be held (operational block 42, operational block 46) in the following by actuating the operational element 34 or all up to now held cards can be thrown out by actuating the entry block 41.

A return is performed from the branching block 45 to the branching block 39, wherein it is checked in the branching block 39, if the game time has ended.

In case of an ended game time the individual results of the slave entertainment automats are scanned (operational block 55) by the entertainment automat 1 turned master. The incoming game results are accumulated by the master and in the following communicated to the slaves (operational block 56). The winning value is determined in the following in the operational block 57. The determined winning value is displayed (operational block 58) with the coordinated display means 21 of the respective entertainment automat 1. A return is performed from the operational block 58 displaying the winning value to the operational block 50 checking the game stake.

The function courses and function flows of a slave entertainment automat are illustrated as a block diagram in Figure 6. The network (operational block 49) is initiated by actuating the power switch of each of the entertainment automats 1, wherein one of the entertainment automats 1 assumes the master function according to figure 5. The further entertainment automats 1 contained in the network switch to slave operation. The slave function comprises

essentially that predetermined data are transmitted continuously to the master after request. A symbol combination is randomly determined in the operational block 50 in case of a sufficient credit balance state and is displayed with the symbol display device 2. An adjustable share part of the stake of each base game is transmitted to a common jackpot counter.

In the following to the determination of the winning value in the base game, it is checked in the branching block 59, if an instruction is present from the master to start thereupon the special game. The receipt of the instruction of the start of the special game is to be confirmed to the master (operational block 60).

The entertainment automat 1 is activated in case of a credit balance state exhibiting at least a game stake. It is checked by an operational block 61, if the master signal for the special games is present. The winning symbols are randomly determined by the control unit 7 not illustrated in detail during the complete game time and the winning symbols are displayed (operational block 38) with the symbol display device 2. A branching block 39 for determining the remaining residual game time is activated by the operational block 38. In case of a presence of a remaining residual

game time it is checked in a branching block 40, if an operational element 3 furnished on the front side of the entertainment automat 1 was actuated. A return is performed to the branching block 39 in case no actuation of an operational element took place.

In case of an actuation of an operational element (entry block 41 -- 42) it is checked, which operational element 3 was actuated. For example, five next to each 8other disposed card symbols are displayed on the symbol display device 2 upon actuation of an operational element 3 according to the entry block 41, wherein the symbol storage comprises 20 card symbols, namely ten, Jack, Queen, King, and ace in each case in all four colors. Cards not held are redrawn by new cards randomly determined from the card storage in the operational block 43. The game result of the displayed symbol combinations is determined and displayed in | the operational block 44. In the following it is determined in the branching block 45, if the maximum winning value, for example a Royal Flush, is displayed with the symbol display In case of a non-reaching of the maximum winning device 2. value, a return is performed from the branching block 45 to the branching block 39, wherein the game time is checked in the branching block 39. Upon reaching of the maximum

winning value, a return is performed from the branching block 45 to the operational block 38, wherein new winning symbols are randomly determined in the operational block 38 and wherein the new winning symbols are displayed with the symbol display device 2. In case of a remaining of residual game time, winning symbols displayed with the symbol display device 2 can be held (operational block 42, operational block 46) in the following by actuating the operational element 3 or all up to now held cards can be thrown out by actuating the entry block 41.

A return is performed from the branching block 45 to the branching block 39 by checking if the game time has ended. A return is performed from the operational block 47 to the operational block 36 by checking if a further credit balance state sufficient for a game stake is present.

In the following the individual game results of the slave entertainment automats are scanned by the entertainment automat 1 made master. The incoming game results are accumulated by the master and in the following communicated to the slaves (operational block 62, Figure 6). In the following thereto a winning value is determined in the operational block 57, wherein the winning value is coordinated to the winning symbol combination coordinated to

the respective entertainment automat 1. The determined winning value is displayed with the coordinated display means 21 of the respective entertainment automat 1 (operational block 58). A return is performed from the operational block 58 displaying the winning value to the operational block 50 checking the game stake.

The jackpot winning amount, for example is \overrightarrow{A} subdivided in ten equal or unequal amounts, wherein the equal or unequal amounts are played out in the special game or, respectively, the supplemental game according to a further embodiment of the Invention according to the flow chart diagram of Figure 7. The symbols of a poker hand are displayed with the symbol game device. A starting symbol combination is presented and displayed randomly, wherein the starting symbol combination can be improved upon by one time or multiple time redrawing. The amount available for playing out is fed to the game apparatus, which game apparatus has achieved the highest winning value according to the winning plan in the respective play out. automatic determination is made which entertainment automat 1 in a network assumes the master or slave function upon initiation of the entertainment automats 1. communication is performed to the respective communications

board 20. Each communications board 20 is associated with an individual address number, wherein the individual address number is set once through a rotary switch. After switching on of each entertainment automat, there is performed the automatic recognition, which entertainment automat 1 assumes The entertainment the master function or slave function. automats 1 wait for a time period of three seconds plus 50 milliseconds (times individual address number) for a recognition signal of the master after switching on. at this point in time no entertainment automat has yet assumed the master functions, the recognition signal does In this case the communication board 20 sends a master function assumption signal after further two seconds. The entertainment automat 1 with the lowest address number will send out this signal first and assume the master function (operational block 49) according to the above recited time calculation. In the following it is checked by the entertainment automat 1 if a credit balance amount permitting a game stake is present and the base game is started (operational block 50). The jackpot amount is collected in parallel in the operational block 51 of the master. The jackpot state is continuously checked by the master (branching block 52). If the jackpot amount reaches

a predetermined limiting value, a recognition sequence is sent (operational block 63) by the master entertainment automat to the displayed entertainment automats. same time the master communicates to the slaves how many times special games or, respectively, supplemental games have to be started. If the master has received the return message (operational block 64) of all further slave entertainment automats, then a supplemental game is started (operational block 65) at the same time at all entertainment automats 1. It is randomly determined from the symbol storage of a poker hand, which symbols are displayed (operational block 66). In the following it is checked in branching block 40, if an operational element 3 was actuated. In case of an operational element actuation (entry block 41 -- 42) it is checked, if an operational element 3 was actuated. In case of actuation of an operational element 3 according to the entry block 41, then card symbols are displayed with the symbol display device 2. Cards not held are redrawn by randomly determined new cards from the card storage in the operational block 43.

Upon actuation of the hand out key (entry block 41) the cards not held or winning symbols not held are replaced by randomly determined new winning symbols. The start of

the new game is synchronized with the further entertainment automats 1 in the following operational block 67. individual game results of each entertainment automat 1 are fed to the master entertainment automat (operational block 58), wherein the master entertainment automat collects and accumulates the individual game results. The obtained game results are communicated to the slaves in a following operational block 69. The winning value coordinated to each obtained symbol combination is communicated to the master entertainment automat. The winning value coordinated to the obtained symbol combination is determined by each slave (operational block 70) in the following and is displayed with the display means disposed on the side of the entertainment automat. A return is performed from the operational block 70 and the branching block [15] by checking, if a predetermined number of games has been performed. the following the winning value display 58 is activated by the branching block 71, and a return is performed from the winning value display 58 to the entry operational block 50 for determining a game entitling credit balance.

The function course and flow diagram of a slave entertainment automat during a special game or a supplemental game is illustrated in Figure 8 by way of a

block circuit diagram. The automatic determination is performed during initiation of operations of the entertainment automats 1, which entertainment automat 1 of the network assumes the master function or the slave The communication is performed to the respective function. communications board 20. Each communications board 20 has associated an individual address number, wherein the individual address number is set once by a rotary switch. After switching on of each one of the entertainment automats 1, the entertainment automats 1 wait for a time period of three seconds plus 50 milliseconds (times individual address number) for a recognition signal of the master. Since at this point in time no entertainment automat 1 has assumed the master functions, the recognition signal does not In this case the communications board 20 sends a master function assumption signal after further two seconds. The entertainment automat 1 with the lowest address number will send out this signal first and assume the master function (operational block 49) and all other entertainment automats 1 will assume the slave function according to the above recited time calculation. In the following the entertainment automat 1 checks if a credit balance amount permitting a game stake is present and the base game is

started (operational block 50). The slave checks continuously (branching block 52), if the master has communicated that the jackpot was released. The master also communicates to the slaves how many times the special games or, respectively, supplemental games have to be started. the confirmation message of all other slave entertainment automats is present at the master, then the supplemental game is started (operational block 65) at the same time at all other entertainment automats 1. It is randomly determined from the symbol storage of a poker hand, which symbols are to be displayed (operational block 66). It is checked in the following branching block 40, if an operational element 3 was actuated. In case of an actuation of an operational element (entry block 41 -- 42) it is checked, which operational element 3 was actuated. Card symbols are displayed with the symbol display device 2 upon actuation of an operational element 3 according to the entry block 41. Cards not held are redrawn by new cards randomly determined from the card storage in the operational block 43.

Upon actuation of the hand out key (entry block 41), the cards not held or winning symbols not held are replaced by winning symbols randomly determined. The start of a new game is synchronized with the further entertainment automats 1 in the following operational block 67. The individual game results of each entertainment automat 1 are fed to the master entertainment automat (operational block 58), wherein the master entertainment automat collects and accumulates the individual game results and communicates the individual game results to the slaves. The winning value associated with the obtained symbol combination is determined in the following by each slave (operational block 70) and is displayed with a display means disposed on the side of the entertainment automat. A return is performed from the operational block 70 to branching block 71 by checking, if the predetermined number of games has been performed. winning value display 58 is activated in the following by the branching block 71 and a return is performed from the winning value display 58 to the entry operational block 50 for determining a presence of a credit balance entitling to a game.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of game system configurations and playout procedures differing from the types described above.

While the invention has been illustrated and described as embodied in the context of a method for operating a coin-operated entertainment automat, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.